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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,122	04/15/2004	Lloyd W. Marsden	13659.5USU1	9871

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EXAMINER

CHEUNG, WILLIAM K

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/826,122	MARSDEN, LLOYD W.	
	Examiner	Art Unit	
	William K. Cheung	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-14 and 19-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>052004, 041504</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's affirmed election of Group I invention, claims 1-14, 19-22, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Therefore, in view of lack of traversal to restriction requirement set forth from Response to Restriction Requirement, the restriction set forth by the examiner is deemed proper and is therefore made Final.
2. Regarding the request for the cancellation of non-elected claims 15-18, applicants are required to submit an amendment for the cancellation.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over West et al. (US 5,459,181).

The invention of claims 1-8 relates to an aqueous mixture comprising:

1000 parts by weight water;

at least about 5 parts by weight of water soluble, hydroxyl group bearing polymer;

the aqueous mixture having viscosity less than about 500 centipoise and, when allowed to dry, forms a substantially insoluble crosslinked polymer.

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West et al. (col. 3, line 59 to col. 4, line 7; col. 4, line 30-53) disclose a composition of matter useful as a tackifier or binder in erosion applications. The composition comprises any water soluble hydroxyl group bearing polymer, such as guar gum or hydroxyl ethyl cellulose. West et al. (col. 6, line 65 to col. 8, line 20) disclose that the dry blend composition that is initially a mixture that is soluble in water, but, after being admixed with water and allowed to dry, said composition becomes a water insoluble, crosslinked polymer. Regarding the claimed "at least about 5 parts by weight of water soluble, hydroxyl group bearing polymer", because the water component of the composition will be removed through drying anyway, the claimed "at least about 5 parts by weight of water soluble, hydroxyl group bearing polymer", carries very little weight. Because West et al. disclose a composition that is substantially identical to the composition as claimed when the water is removed, the examiner has a reasonable basis to believe that the claimed "viscosity less than about 500 centipoise" at the claimed concentration is inherently possessed in the composition of West et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

6. Claims 1-14, 19-22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ainley et al. (SPE 25463: A

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comparision of Delay Metholody, Production Operations Symposium, Oklahoma City, OK, March 21-23, 1993. pp. 517-520).

*The invention of claims 9-14 relates to an **aqueous mixture** for hydraulic application to an aggregate surface that, **when allowed to dry, forms a substantially water insoluble, crosslinked polymer on the aggregate surface**, the aqueous mixture comprising:*

1000 parts by weight water;

at least about 5 parts by weight water soluble, hydroxyl group bearing polymer;

at least one crosslinking agent;

and the aqueous mixture having viscosity less than about 500 centipoise.

*The invention of claims 19-22 relates to a **hydroxyl group bearing polymer crosslinking mixture** comprising:*

glyoxal;

and a heavy metal based crosslinking agent;

wherein a weight ratio of glyoxal to the heavy metal based crosslinking agent is about 0.1 to about 1.5.

Ainley et al. (page 517, Introduction) disclose an aqueous composition comprising Guar and a heavy metal based crosslinking agent. Regarding the claimed

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“at least about 5 parts by weight of water soluble, hydroxyl group bearing polymer”, because the water component of the composition will be removed through drying anyway, the claimed “at least about 5 parts by weight of water soluble, hydroxyl group bearing polymer”, does not carry much weight on the claimed invention because the water component will be removed anyway. Because Ainley et al. disclose a composition that is substantially identical to the composition when the composition is dried as claimed, the examiner has a reasonable basis to believe that the claimed “viscosity less than about 500 centipoise” at the claimed concentration is inherently possessed in the composition of Ainley et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung

Primary Examiner

July 10, 2005

**WILLIAM K. CHEUNG
PRIMARY EXAMINER**